

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1-16. (Cancelled).
- 1 17. (Currently Amended) A method of wireless communication, comprising:
2 transmitting a message to one or more wireless units, said message including (i) a first
3 control data that causes said one or more wireless units to enable request to send (RTS) and
4 clear to send (RTS/CTS) data transmissions in transmitting data packets to an access point,
5 and (ii) a second control data that causes said one or more wireless units to automatically
6 adjust a fragmentation threshold in response to changes within the wireless transmission
7 medium based on a finite time duration for data packet transmission taking in account a size
8 of each data packet and a data rate for transmission of each data packet; and
9 measuring a transmission error factor and adjusting the fragmentation threshold in
10 accordance with said measured transmission error factor by dividing a maximum
11 fragmentation threshold by a divisional factor greater than or equal to one, the divisional
12 factor being (i) decremented when the transmission error factor is greater than an upper
13 threshold, (ii) incremented when the transmission error factor is less than a lower threshold
14 and (ii) maintained constant when the transmission error factor is less than the upper
15 threshold and greater than the lower threshold.
- 1 18. (Original) The method of claim 17, wherein said message comprises a
2 multicast data packet intended for said one or more associated wireless units.
- 1 19. (Cancelled).
- 1 20. (Cancelled).
- 1 21. (Currently Amended) An access point having a logic circuit to transmit a
2 message to one or more associated wireless unit, wherein said message includes (i) a first
3 control data that causes said one or more associated wireless units to enable request to send
4 (RTS) and clear to send (RTS/CTS) data transmissions in transmitting at least one data

5 packet to said access point, and (ii) a second control data that causes said one or more
6 associated wireless units to automatically adjust a fragmentation threshold in response to
7 changes within the wireless transmission medium based on a finite time duration for data
8 packet transmission taking in account a size of said data packet and a data rate for
9 transmission of said data packet, said logic circuit being operable to continue to adjust the
10 fragmentation threshold ~~through subsequent messages~~ based on a measured transmission
11 error factor where said transmission threshold is equal to a maximum fragmentation threshold
12 divided by a divisional factor greater than or equal to one, the divisional factor being (i)
13 decremented when the measured transmission error factor is greater than an upper threshold,
14 (ii) incremented when the measured transmission error factor is less than a lower threshold
15 and (ii) maintained constant when the measured transmission error factor is less than the
16 upper threshold and greater than the lower threshold.

1 22. (Original) The access point of claim 21, wherein said message comprises a
2 multicast data packet intended for said one or more associated wireless units.

1 23. (Cancelled).

1 24. (Cancelled).

1 25. (Currently Amended) A machine readable medium including a software
2 routine to control a logic circuit to transmit a message to one or more associated wireless
3 unit, wherein said message includes (i) a first control data that causes said logic circuit to
4 enable request to send (RTS) and clear to send (RTS/CTS) data transmissions in transmitting
5 data packets to said access point, and (ii) a second control data that causes said one or more
6 associated wireless units to automatically adjust a fragmentation threshold in response to
7 changes within the wireless transmission medium based on a finite time duration for a
8 transmission of one of said data packets taking in account a size of said one of said data
9 packets and a data rate for transmission of said one of said data packets and to continue to
10 adjust the fragmentation threshold based on a measured transmission error factor where said
11 transmission threshold is equal to a maximum fragmentation threshold divided by a
12 divisional factor greater than or equal to one, the divisional factor being (i) decremented
13 when the measured transmission error factor is greater than an upper threshold, (ii)
14 incremented when the measured transmission error factor is less than a lower threshold and

15 (ii) maintained constant when the measured transmission error factor is less than the upper
16 threshold and greater than the lower threshold.

1 26. (Original) The machine readable medium of claim 25, wherein said message
2 comprises a multicast data packet intended for said one or more associated wireless units.

1 27. (Currently Amended) The machine readable medium of claim 25, wherein
2 said second control data of said message includes a current fragmentation threshold being
3 determined by the access point (i) comparing the transmission error factor to ~~an~~ the upper
4 threshold, (ii) decreasing the finite time duration by decreasing the fragmentation threshold if
5 the transmission error factor is above the upper threshold, (iii) comparing the transmission
6 error factor to ~~thea~~ the lower threshold, and (iv) increasing the finite time duration by increasing
7 the fragmentation threshold if the transmission error factor is below the lower threshold.

1 28. (Cancelled).

1 29. (Currently Amended) A wireless unit, comprising:

2 a wireless transceiver to communicate with an access point via a wireless
3 transmission medium; and

4 a logic circuit to receive a message from said access point by way of said wireless
5 transceiver, wherein said message includes (i) a first control data that causes a request to send
6 (RTS) and clear to send (RTS/CTS) transmission of data to said access point, and (ii) a
7 second control data that causes automatic adjustment of a fragmentation threshold supported
8 by said wireless unit in response to changes within the wireless transmission medium based
9 on a finite time duration for transmission of a data packet taking into account a size of said
10 data packet and a rate for transmission of said data packet, said logic circuit to continue to
11 adjust said fragmentation threshold through subsequent messages based on a measured
12 transmission error factor,

13 wherein said transmission threshold is equal to a maximum fragmentation threshold
14 divided by a divisional factor greater than or equal to one, the divisional factor being (i)
15 decremented when the measured transmission error factor is greater than an upper threshold,
16 (ii) incremented when the measured transmission error factor is less than a lower threshold

17 and (ii) maintained constant when the measured transmission error factor is less than the
18 upper threshold and greater than the lower threshold.

1 30. (Original) The wireless unit of claim 29, wherein said message comprises a
2 multicast data packet.

1 31. (Currently Amended) The wireless unit of claim 29, wherein said second
2 control data of said message includes said a-current fragmentation threshold being
3 determined after said access point (i) compares said transmission error factor to ~~an~~ the upper
4 threshold and reduces a prior fragmentation threshold to the ~~current~~ fragmentation threshold
5 if the transmission error factor is greater than the upper threshold and (ii) compares the
6 transmission error factor to ~~thea~~ the lower threshold and increases the prior fragmentation
7 threshold to the ~~current~~ fragmentation threshold if the transmission error factor is less than
8 the lower threshold.

1 32. (Previously Presented) The wireless unit of claim 29, wherein said second
2 control data including a reduced fragmentation threshold provided in real-time in response to
3 a change in the wireless transmission medium due to an increase in RF interference.

1 33-40. (Cancelled).

1 41. (Currently Amended) An access point having a logic circuit to transmit a
2 message to one or more associated wireless unit, said message includes a first control data
3 that causes said one or more associated wireless units to adjust a fragmentation threshold in
4 transmitting data packets to said access point and a second control data that causes said one
5 or more wireless units to use request to send (RTS) and clear to send (CTS) in the
6 transmission of data to said access point, said logic circuit to adjust of the fragmentation
7 threshold based on a time duration for transmission of said message taking into account a size
8 of said message and a rate for transmission of said message and to continue to adjust the
9 fragmentation threshold through subsequent messages based on a measured transmission
10 error factor,

11 wherein said transmission threshold is equal to a maximum fragmentation threshold
12 divided by a divisional factor greater than or equal to one, the divisional factor being (i)

13 decremented when the measured transmission error factor is greater than an upper threshold,
14 (ii) incremented when the measured transmission error factor is less than a lower threshold
15 and (ii) maintained constant when the measured transmission error factor is less than the
16 upper threshold and greater than the lower threshold.

1 42. (Previously Presented) The access point of claim 41, wherein said message is
2 a multicast data packet intended for said one or more wireless units.

1 43. (Previously Presented) The access point of claim 41, wherein said message
2 further includes a specified fragmentation threshold to be used by said one or more wireless
3 units.

1 44. (Currently Amended) A machine readable medium including a software
2 routine executed to control a logic circuit to transmit a message to one or more associated
3 wireless unit, said message includes (i) a first control data that causes said one or more
4 associated wireless units to use request to send (RTS) and clear to send (CTS) in the
5 transmission of data to an access point, and (ii) a second control data that causes automatic
6 adjustment of a fragmentation threshold supported by said wireless unit in response to
7 changes within the wireless transmission medium based on a finite time duration for a
8 transmission of a data packet taking in account a size of said data packet and a data rate for
9 transmission of said data packet, said logic circuit to continue to adjust said fragmentation
10 threshold through subsequent messages based on a measured transmission error factor,
11 wherein said fragmentation threshold is equal to a maximum fragmentation threshold
12 divided by a divisional factor greater than or equal to one, the divisional factor being (i)
13 decremented when the measured transmission error factor is greater than an upper threshold,
14 (ii) incremented when the measured transmission error factor is less than a lower threshold
15 and (ii) maintained constant when the measured transmission error factor is less than the
16 upper threshold and greater than the lower threshold.

1 45. (Previously Presented) The machine readable medium of claim 44, wherein
2 said message further includes a second control data that causes said one or more associated
3 wireless units to implement fragmentation threshold in transmitting data packets to said
4 access point.

- 1 46. (Previously Presented) The machine readable medium of claim 45, wherein
- 2 said message further includes a specified fragmentation threshold to be used by said one or
- 3 more associated wireless units.